



SARRAH

Services for Australian
Rural and Remote Allied Health



SUBMISSION TO THE SELECT COMMITTEE INTO THE OBESITY EPIDEMIC IN AUSTRALIA

The impact of obesity in rural and remote Australia

About SARRAH

Services for Australian Rural and Remote Allied Health (SARRAH) was established in 1995. SARRAH is a grassroots' organisation advocating on behalf of rural and remote Australian communities in order for them to have access to allied health services which support equitable and sustainable health and well-being.

SARRAH is also nationally recognised as the peak body representing rural and remote allied health professionals (AHPs) working in the public and private sector. SARRAH develops and provides services for AHPs to confidently and competently carry out their professional duties in providing a range of clinical and health education services to people who reside in these settings.

SARRAH's representation comes from a range of allied health professions including but not limited to: Audiology, Dietetics, Exercise Physiology, Occupational Therapy, Optometry, Oral Health, Pharmacy, Physiotherapy, Podiatry, Psychology, Social Work and Speech Pathology. AHPs are critical players in the management of their clients' health needs, particularly in relation to chronic disease and complex care needs. AHPs are also key health professionals in the treatment and management of the chronic diseases lined to obesity – particularly cardiovascular disease and type-2 diabetes and its sequelae.

SARRAH appreciates the opportunity to provide information and opinion about the impact of obesity in rural and remote Australia.

In this submission, SARRAH makes use of data from two key documents developed by the Australian Institute of Health and Welfare – [A picture of overweight and obesity in Australia 2017](#) and [Overweight and obesity in Australia: A birth cohort analysis](#). The policy brief on [Overweight, Obesity and chronic diseases](#), developed by the Obesity Policy Coalition, is also used as is the National Rural Health Alliance [Factsheet on Obesity](#). Other documents used are footnoted in the text.

One of the issues that SARRAH brings to the attention of the Committee is that the data on obesity in rural and remote Australia is compromised as two of the surveys that are used to inform policy debate – the Australian Health Survey and the National Nutrition and Physical Activity Survey – do not sample in very remote Australia and also exclude Indigenous communities. The Australian Aboriginal and Torres Strait Islander Health Survey, however, includes very remote and Indigenous communities and provides a more comprehensive analysis of the impact of overweight and obesity in rural and remote Indigenous communities. Unfortunately non-Indigenous people living in very remote communities are not represented in the data.

Rate of obesity in rural and remote Australia

Results from the 2011-12 Australian Health Survey, with information from 47,000 Australians from urban, regional and remote locations, show that 63 per cent of the population are either overweight or obese. This is an increase from 56 per cent in 1995 and 60 per cent in 2007-08. Around one-quarter of children aged 5-17 years are overweight or obese.

In 2010-11 there was also an increasing rate of adult overweight or obesity by remoteness. The rate of overweight or obese adults was 61.6 per cent in major cities and increased to 66.8 per cent for inner regional areas, 68.4 per cent for outer regional areas and 72.8 per cent for remote areas.

The AIHW notes that consuming low-nutrient, energy-dense foods, and drinks, not doing enough physical activity, a sedentary lifestyle, and insufficient sleep can result in weight gain, leading to overweight and obesity. A person's appetite, satiety, metabolism, and body fat distribution can also contribute to overweight and obesity, and this might be influenced by their genetics and epigenetic changes.

In addition to these causes cited by the AIHW, causes of obesity can be linked to place – for example, people living in remote communities can find it difficult to source an affordable healthy diet due to the high cost of food and the impact of extended chains of supply on the freshness of fruit and vegetables. This results in people sourcing their diet from more affordable foods – often those that are low-nutrient and energy-dense.

Further, poverty can also result in the same outcome, with people sourcing what is affordable. Where both poverty and place combine, for example in many remote Indigenous communities, rates of overweight and obesity can soar.

The people who are affected by these environmental challenges are among the most disadvantaged in Australia – Aboriginal and Torres Strait Islander people, single parent families and people on welfare benefits¹.

Compared with non-Indigenous Australians, Indigenous males and females were:

- slightly less likely to be overweight; but
- respectively, 1.6 and 2.2 times as likely to be obese.

Women in the most disadvantaged socioeconomic group have nearly double the rate of obesity of those in the most advantaged group (23 per cent compared with 12 per cent). Men in the most disadvantaged group are also significantly more likely to be obese than those in the most advantaged group (20 per cent compared with 13 per cent).

The COAG Reform Council reported that in 2011-12 at least 68 per cent of people from regional and remote areas (irrespective of SES) were overweight or obese

¹ <https://www.agrifutures.com.au/wp-content/uploads/publications/16-053.pdf> p9

compared with a similar percentage (67 per cent) from disadvantaged parts of Major cities, and a substantially lower percentage (57 per cent) of people from advantaged parts of Major cities

From a policy viewpoint, the causes of overweight and obesity need to be seen in the broad context – both over-nutrition and under-nutrition can result in obesity. Responding to these challenges cannot be through a simplistic policy that focuses on messages to eat a healthier diet and exercise more if a significant proportion of the target audience is simply incapable of eating a healthier diet.

The telling information from the AIHW is that since 1995, each birth cohort is heavier than its predecessor at all ages. And that with increasing rates of overweight and obesity, comes increasing risk of a wide range of chronic diseases.

Without taking long-term and sustained action, Australia will be facing an epidemic of chronic disease that will grow significantly over the next 40 years, with an accompanying fall in the average life span.

The health impact of overweight and obesity

Overweight and obesity are significant risk factors for a range of chronic diseases including cardiovascular disease, type-2 diabetes, kidney disease, osteoarthritis, and several forms of cancer, with growing evidence of an association between overweight and obesity and periodontal disease².

SARRAH will look at type-2 diabetes to provide a brief discussion of the range of health impacts due to overweight and obesity.

Type-2 diabetes

In 2014, the AIHW undertook a study of the number of young people diagnosed with type-2 diabetes – the form of diabetes linked to overweight and obesity. They found:

- From 2002–03 to 2011–12, there were nearly 39,000 new cases of type-2 diabetes among those aged 10–39—this represented around 9% of all new cases.
- Among young people, the risk of type-2 diabetes rose with increasing age— from an average annual rate of new cases of 3 per 100,000 population in 10–14 year olds, to 8 per 100,000 for those aged 15–19 and 16 per 100,000 for those aged 20–24.
- From 2002–03 to 2011–12, there were around 4,000 new cases of type 2 diabetes among those aged 10–24—an average of nearly 400 new cases per year.

² Keller A, Rohde JF, Raymond K, Heitmann BL. Association between periodontal disease and overweight and obesity: a systematic review. *J Periodontol.* 2015;86:766-76

- In 2006–11, the age-specific rate of type-2 diabetes for Indigenous Australians was higher than for non-Indigenous Australians—8 times as high among 10–14 year olds and around 4 times as high for 15–19 and 20–24 year olds.

Recently, the AIHW reported that in people living in remote and very remote Australia, the rates of death and hospitalisation due to type-2 diabetes is double that in the major cities and that the rates of death and hospitalisation of Aboriginal and Torres Strait Islander people is four times that of non-Indigenous people³ (see Attachment A).

While improved access to health care is vital to address these poor health outcomes in rural and remote Australia, addressing the underlying drivers of obesity and other risk factors is the only way in which these outcomes can be reduced over the long term. Initiatives addressing both the long-term and short-term are vital to produce lasting change.

Managing overweight and obesity

Overweight and obesity impacts on all aspects of life – not just health, but also the mental health and overall wellbeing of individuals and their capacity to engage with society through education and employment.

Research is needed to determine the causes of the burgeoning weight of rural and remote young people – if the cause is lack of access to an affordable healthy diet, the responses will necessarily be different to findings indicating availability of an affordable healthy diet but choice of an energy dense diet in preference.

Poverty is another potential underlying cause. Poverty may result in poor housing conditions with people having no or limited access to cooking and food storage. Poverty may result in limited education that restricts an understanding of the role of a healthy diet in achieving wellbeing. Poverty may result in hopelessness and depression due to lack of jobs. Where these are underlying causes of overweight and obesity, addressing poverty must be undertaken first if lasting change is to be achieved and the rates of related chronic diseases are to be reduced.

In considering managing the health impacts, it is necessary to have a clear strategy that addresses the range of drivers of overweight and obesity – under-nutrition, over-nutrition and exercise. And these issues need to be understood within a social determinants of health framework as it is these social determinants that provide the context that determines the barriers to a healthy diet and lifestyle for individuals and communities.

This requires a multidisciplinary approach to both policy development and policy implementation. It also requires a workforce that is available to address the areas of

³ <https://www.aihw.gov.au/reports-statistics/health-conditions-disability-deaths/diabetes/overview>

greatest need – particularly in rural and remote Australia – and methods for appropriately funding that workforce.

Attachment B includes recent workforce data released by the Department of Health and the Australian Health Practitioner Registration Agency.

What it clearly shows is a significant maldistribution of the allied health workforce. How this may impact in addressing the health impact of overweight and obesity is illustrated by once again looking at type-2 diabetes.

Ideally, treatment of diabetes and its sequelae would be undertaken by a team that may include a general practitioner, nurse, diabetes educator, podiatrist, optometrist, dietitian/nutritionist, oral health worker, exercise physiologist, pharmacist and psychologist, depending on the needs of the individual. While data is not available for all allied health professions, the limited data included in Attachment B indicates that access to this range of allied health professionals is limited in rural communities, and in remote and very remote communities may be difficult to simply unavailable.

This in turn is at least partly responsible for poor health outcomes. The lack of access to quality diabetes care can result in diabetic foot disease, which may lead to lower limb amputations. As shown in Attachment C, an excerpt from the Atlas of Health Care Variation V2, published by the Australian Commission on Safety and Quality in Healthcare, the rate of diabetes related lower limb amputations is highest in remote and very remote communities – particularly in the Northern Territory and Queensland.

Moving forward

Overweight and obesity are significant issues in rural and remote Australia. The reasons for this are diverse and will require tailored solutions that approach the issue from different directions.

People in rural and particularly remote communities need access to affordable healthy food and to have the culturally appropriate information and infrastructure available to them to make use of that food.

To tailor the solutions appropriately, we need quality, timely data on the underlying causes of overweight and obesity. And we need access to a multidisciplinary team to work with individuals and empower them to achieve better health outcomes.

To do this, we need to address the current barriers to those teams being available – we need to address the maldistribution of the allied health workforce and we need to find ways to make them affordable.

Allied health workers tend to be either employed by governments, or privately or self-employed. A key barrier to better distribution of the allied health workforce is finding sustainable models of service. While some allied health professionals have access to the Chronic Disease Management items of the Medicare Benefits

Schedule, this access is limited and the amount payable does not cover the cost of providing services, particularly in remote and very remote settings.

Addressing allied health workforce barriers requires more than recruitment and retention of additional allied health professionals. It requires consideration of different funding options that recognise the cost of remote and very remote practice. It should also consider the training and the skills set of the rural and remote allied health professional.

The Allied Health Rural Generalist Pathway has been developed to address this specific issue. By developing additional skills to support more effective practice in rural and remote communities through working to an expanded scope of practice, Allied Health Rural Generalists are better placed to provide the additional support and management needed to address the health impact of overweight and obesity in rural and remote communities, but also to work with those communities to develop local, long-term solutions.

In conclusion

There is no simple solution to turning around the growing rates of overweight and obesity in rural and remote communities.

We need to understand the underlying causes and solutions must be tailored to suit local communities in both the short-term and long-term. Governments must work together to commit to long-term change, fully funded for the duration.

We need better access to multidisciplinary teams of health professionals to lead better clinical and personal management of the health impacts of chronic diseases resulting from overweight and obesity. We also need to ensure that these health professionals have the skills they need work with individuals and communities to achieve better health outcomes – for example through access to the Allied Health Rural Generalist Pathway and the medical Rural Generalist program.

We need to look at how to fund these interventions to support effective and sustainable rural and remote practice.

And we need to take action now.

Diabetes deaths (underlying and/or associated cause), 2013–2015

| Population subgroup | Deaths per 100,000 population | | |
|---|-------------------------------|---------|---------|
| | Males | Females | Persons |
| Remoteness | | | |
| Major cities | 67 | 42 | 53 |
| Inner regional | 72 | 45 | 57 |
| Outer Regional | 81 | 54 | 67 |
| Remote and very remote | 99 | 95 | 97 |
| Aboriginal and Torres Strait Islander status^(b) | | | |
| Indigenous | 225 | 228 | 227 |
| Non-Indigenous | 70 | 43 | 55 |

(a) Analysis for socioeconomic groups is for 2015 only.

(b) Includes data from NSW, QLD, WA, SA and NT only.

Notes:

1. Age-standardised to the 2001 Australian Standard Population.

2. Remoteness is classified according to the Australian Statistical Geography Standard 2011 Remoteness Areas structure based on Statistical Area Level 2 (SA2) of usual residence.

Type 2 diabetes hospitalisations (principal and/or additional diagnosis) by remoteness 2015–16

| Population subgroup | Hospitalisations per 100,000 population ^(a,b) | | |
|---|--|---------|---------|
| | Males | Females | Persons |
| Remoteness^(c) | | | |
| Major cities | 4,167 | 2,870 | 3,461 |
| Inner regional | 4,198 | 2,964 | 3,548 |
| Outer Regional | 4,382 | 3,172 | 3,766 |
| Remote and very remote | 5,582 | 7,845 | 6,540 |
| Aboriginal and Torres Strait Islander status | | | |
| Indigenous | 11,843 | 14,727 | 13,350 |
| Non-Indigenous | 3,883 | 2,716 | 3,266 |

Notes:

(a) Age-standardised to the 2001 Australian Standard Population.

(b) Hospitalisation rates have been calculated using population estimates for Australia, which includes Other Territories.

(c) Remoteness is classified according to the Australian Statistical Geography Standard 2011 Remoteness Areas structure based on Statistical Area Level 2 (SA2) of usual residence.

Workforce by remoteness

| | Major cities | Inner regional | Outer regional | Remote | Very remote |
|-----------------------------------|---|----------------|----------------|--------|-------------|
| Allied Health Professions | Total Full Time Equivalent (FTE) workforce | | | | |
| Medical Radiation Practitioners | 9521 | 1876 | 631 | 74 | 25 |
| Oral health practitioners | 14246 | 2623 | 1099 | 124 | 44 |
| Occupational Therapists | 10777 | 2059 | 950 | 112 | 46 |
| Optometrists | 3421 | 688 | 234 | 27 | 8 |
| Osteopaths | 1379 | 268 | 47 | NP | NP |
| Pharmacists | 17219 | 3389 | 1593 | 220 | 93 |
| Physiotherapists | 17987 | 2878 | 1132 | 129 | 82 |
| Podiatrists | 3071 | 747 | 224 | 31 | 12 |
| Psychologists | 17881 | 2659 | 936 | 104 | 42 |
| Other health professionals | | | | | |
| Medical practitioners | 76411 | 13129 | 5814 | 975 | 446 |
| Nurses and Midwives | 200554 | 47994 | 22459 | 3833 | 2413 |

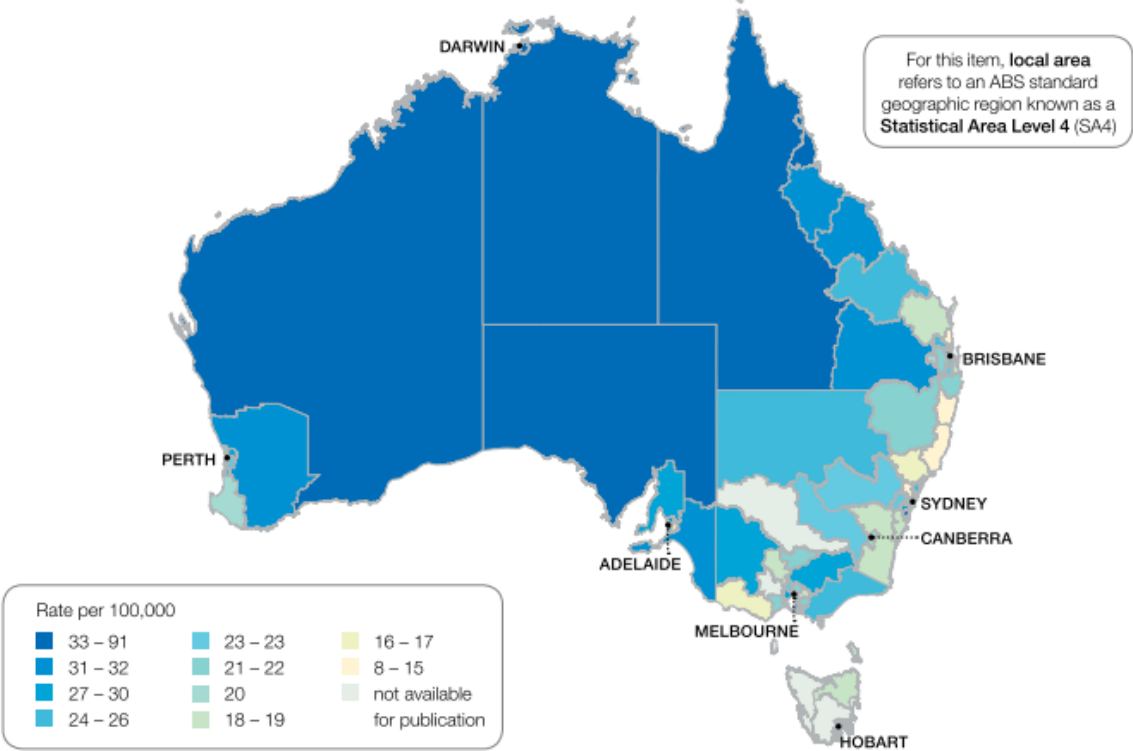
| | Major cities | Inner regional | Outer regional | Remote | Very remote |
|-----------------------------------|---|-----------------------|-----------------------|---------------|--------------------|
| Allied Health Professions | No of FTE practitioners per 100,000 population | | | | |
| Medical Radiation Practitioners | 54.93 | 43.22 | 30.90 | 25.19 | 12.35 |
| Oral health practitioners | 82.20 | 60.42 | 53.82 | 42.21 | 21.74 |
| Occupational Therapists | 62.18 | 47.43 | 46.52 | 38.13 | 22.73 |
| Optometrists | 19.74 | 15.85 | 11.46 | 9.19 | 3.95 |
| Osteopaths | 7.96 | 6.17 | 2.30 | NP | NP |
| Pharmacists | 99.35 | 78.07 | 78.01 | 74.89 | 45.95 |
| Physiotherapists | 103.78 | 66.30 | 55.44 | 43.91 | 40.51 |
| Podiatrists | 17.72 | 17.21 | 10.97 | 10.55 | 5.93 |
| Psychologists | 103.17 | 61.25 | 45.84 | 35.40 | 20.75 |
| Other health professionals | | | | | |
| Medical practitioners | 440.88 | 302.44 | 284.73 | 331.90 | 220.34 |
| Nurses and Midwives | 1157.15 | 1105.59 | 1099.88 | 1304.78 | 1192.12 |

Workforce data from <http://hwd.health.gov.au/summary.html#part-3>

ABS data 3218.0 - remoteness area download

Diabetes-related lower limb amputation hospital admissions 18 years and over

Figure 136: Number of diabetes-related lower limb amputation admissions to hospital per 100,000 people aged 18 years and over, age standardised, by local area, 2012-13



Source: https://www.safetyandquality.gov.au/wp-content/uploads/2015/11/SAQ201_07_Chapter6_v7_FILM_tagged_merged_6-8.pdf